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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,293	12/31/2003	Stephen Chen	BHT-3204-56	8404

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BRUCE H. TROXELL
SUITE 1404
5205 LEESBURG PIKE
FALLS CHURCH, VA 22041

EXAMINER

ALAM, FAYYAZ

ART UNIT	PAPER NUMBER
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2618

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/748,293	Applicant(s) CHEN, STEPHEN	
	Examiner Fayyaz Alam	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Yamanushi et al. (USPN 2004/0042350)**.

Consider **claim 1**, Yamanushi discloses a portable audio player (100) (read as car stereo hard disk player; see abstract; [0077]) comprising: a case for receiving hard disk drives installed on a selected location (inherently, since a removable or non-removable storage device (20) is disclosed in [0082] which would inherently be received in a "case" in order to create an interface and protect the said device either partially or wholly, where the case would be installed on a selected location; see fig. 1); storage device (20) (read as hard disk drive) for storing digital audio (read as music) data (see

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[0082]); microcomputer (16) (read as music control unit) supplies data (read as reading the digital music data stored in the hard disk drive) to the radio communication device (24) (read as broadcasting) (see [0083]; fig. 1); radio communication device (24) (read as radio emission unit) for modulating the digital music broadcast by the microcomputer (16) (read as music control unit) to radio signals to be received and broadcast through Bluetooth or wireless communication of an on-vehicle audio player (200) (read as car stereo) (see fig. 1; [0086; 0089; 0110]).

However, Yamanushi fails to disclose FM function.

In the same reference, Yamanushi discloses FM transmitter and using the FM function of the on-vehicle player (read as car stereo) to receive FM broadcast from the portable player (see [0006]).

Although, Yamanushi not specifically discloses that the broadcast is performed through FM function, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to make use of the FM function of the car stereo since it already exists in all conventional car stereos and thus would be inexpensive and cost effective.

Consider **claim 3** as applied to claim 1, Yamanushi discloses radio communication device (24) (read as radio emission unit) for modulating the digital music broadcast by the microcomputer (16) (read as music control unit) to radio signals to be received and broadcast through Bluetooth or wireless communication of an on-vehicle audio player (200) (read as car stereo) (see fig. 1; [0086; 0089; 0110]), but fails to disclose broadcast through FM function of the car stereo.

In the same reference, Yamanushi discloses FM transmitter and using the FM function of the on-vehicle player (read as car stereo) to receive FM broadcast from the portable player (see [0006]).

Although, Yamanushi not specifically discloses that the broadcast is performed through FM function, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to make use of the FM function of the car stereo since it already exists in all conventional car stereos and thus would be inexpensive and cost effective.

Consider **claim 5** as applied to claim 1, Yamanushi discloses a display device such as an LCD (read as display screen) and an operation panel such as a touch panel, button, or key (read as operation button key) for allowing user input and monitor the operation (read as displaying user selection and broadcast data) (see [0087]).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Yamanushi et al. (USPN 2004/0042350)** in view of **Schulhof et al. (USPN 5,572,442)**.

Consider **claim 2** as applied to claim 1, Yamanushi discloses microcomputer (16) (read as music control unit) includes: hard disk flat cable for connecting to the hard disk drive for connecting to the hard disk drive to transmit data (inherently, since a storage device (20) in [0082] can be a hard disk, memory stick, etc., where connection wires or cable will be inherently included in the I/O interface; see [0082]); a hard disk interface chip for reading the data stored in the hard disk (inherently, since the audio data is read by the microcomputer (16) and provide to the radio communication device (24),

therefore, there must be a mechanism or an interface for reading the data from the storage device (20); see [0082 - 0083]).

However, Yamanushi fails to disclose a digital music decoding unit for transforming the digital music data read from the hard disk to music signals for broadcasting.

In the related field of endeavor, Schulhof discloses processor (64) (read as digital music decoding unit) converts (read as transforming) digital material (read as digital music data) to analog audio signals (read as music signals) that may be used to drive a modulator (61), which in turn provides an analog RF signal to the car radio (46) (read as broadcasting) (see col. 11, lines 60 - 64; figs. 1 - 2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Yamanushi with the teachings of Schulhof in order to provide digital audio data to analog audio data for transmission and playback through FM car stereo.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Yamanushi et al. (USPN 2004/0042350)** in view of **Liang (USPN 2005/0120165)**.

Consider **claim 4** as applied to claim 1, Yamanushi fails to disclose an AM emission circuit for modulating the digital music broadcast by the music control unit to radio signals to be received and broadcast through a modulating function of the car stereo.

In the related field of endeavor, Liang discloses wireless transmitter circuit C10 and wireless signals of the transmitter C11 comply with Am signals (read as an AM

emission circuit for modulating the digital music broadcast by the music control unit to radio signals to be received and broadcast through a modulating function of the car stereo) (see [0016]).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Yamanushi with the teachings of Liang in order to make use of the AM function of the car stereo since it already exists in all conventional car stereos and thus would be inexpensive and cost effective.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Yamanushi et al. (USPN 2004/0042350)** in view of **Yasuhara (USPN 2003/0053638)**.

Consider **claim 6** as applied to claim 1, Yamanushi fails to disclose a remote controller to facilitate music selection.

In the related field of endeavor, Yasuhara discloses a remote controller (14) for music or entertainment selection (see figs. 1 and 8).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Yamanushi with the teachings of Yasuhara in order to provide a remote controller for ease of use and user friendliness.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Yamanushi et al. (USPN 2004/0042350)** in view of **Finn (USPN 2006/0131431)**.

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Consider **claim 7** as applied to claim 1, Yamanushi discloses storage device (20) is a hard drive or a memory stick, which inherently have a casing or a shell to protect the memory and an I/O interface such a USB interface.

Nevertheless, Finn discloses a USB memory stick with a shell and socket to couple with computer I/O.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the teachings of Yamanushi with the teachings of Finn in order to have a well known feature to conserve financial resources.

Conclusion

Any response to this Office Action should be **faxed to** (571) 273-8300 **or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the

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Examiner should be directed to Fayyaz Alam whose telephone number is (571) 270-1102. The Examiner can normally be reached on Monday-Friday from 9:30am to 7:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Edan Orgad can be reached on (571) 272-7884. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Fayyaz Alam

June 20, 2007

EDAN ORGAD
PRIMARY PATENT EXAMINER

Edan Orgad 6/21/07